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STANDARDS

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Q: Is ethanol good for my car?

A: Yes! Gasoline enriched with ethanol performs in much the same way that regular gasoline does, and actually surpasses regular gasoline in key performance categories. All auto manufacturers who sell cars in the United States approve fuels enriched with up to 10 percent ethanol — and many recommend it for its clean-burning benefits.

Q: Which blend of ethanol fuel should I use?

A: Today's cars are built to run on fuel enriched with up to 10 percent ethanol and are warranted for its use. More and more vehicles are designed to run on E85 — a blend containing 85% ethanol, 15% gasoline. To find out which fuel is best for your car, check your owner's manual, ask your dealer, or visit www.drivingethanol.org.

Q: How does ethanol affect gas mileage?

A: While there are many variables that affect fuel economy (weather, car condition, road grade, tire pressure, air conditioner use, etc.), studies indicate that fuel economy with ethanol-enriched fuels is not likely to decrease with E10. With E85, the fuel economy loss varies between 10 to 20%, however, it generally sells for 40-60 cents a gallon less than regular unleaded, offsetting the mileage penalty.

Q: Can I use ethanol in my small engines?

A: E10 is perfectly acceptable in lawn mowers, weed eaters, chainsaws, ATVs and other small engines that run on ordinary unleaded gasoline. More than half of the gasoline sold across the United States contains ethanol, so small engine manufacturers have made certain their engines perform on these clean-burning fuels. Generally, E10 may be used anywhere that ordinary unleaded gasoline is used — from lawn mowers to personal watercraft, from power equipment to marine engines. Virtually every small engine manufacturer, including Briggs & Stratton, Honda, Toro/Lawnboy, Kohler and Snapper, approves the use of E10 in its equipment. Check your owner's manual for specific information regarding your equipment.

Q: Can I use ethanol in my older vehicles?

A: The formulation of gasoline has changed considerably over the past few years without affecting the performance of older cars. Many older cars were designed to run on leaded gasoline, with the lead providing the octane necessary for engine performance. When lead was phased out of gasoline, oil companies added toxic chemicals to raise the octane rating and other additives to replace the "lubrication" value of lead. The ethanol in E10 raises octane in gasoline by three points and it does so using a natural, renewable additive that works well in older engines.

Q: Can I use ethanol in my motorcycle?

A: The use of E10 is approved for use by major motorcycle manufacturers including Harley-Davidson, Honda, Kawasaki, Suzuki and Yamaha. Harley-Davidson goes so far as to recommend the use of renewable, clean air fuels such as E10 because of their environmental and performance benefits.

Q: Doesn't it take more energy to produce ethanol?

A: There have been nine different groups that have studied the energy balance issue over the years and eight of the nine concluded that ethanol produces a positive energy balance. A few have published multiple reports which show ethanol energy yield continues to increase as farming practices improve and ethanol production facilities incorporate the latest in technology. The U.S. Department of Agriculture (USDA), working with Argonne National Labs, concluded ethanol yields a 34% British Thermal Unit (BTU) improvement. More importantly, the study showed that for every BTU of liquid fossil fuel used primarily in farming and transportation to the ethanol facility, ethanol provides six times the BTU extension of our liquid fossil fuels.

Q: Will ethanol plug my fuel lines and fuel injectors?

A: Situations involving plugged fuel filters are virtually non-existent today. In the past (especially in cars made prior to 1975), switching to ethanol-blended gasoline occasionally resulted in the fuel system being scrubbed clean due to the cleansing nature of ethanol. The loosened residue would be caught in the fuel filter— requiring a filter change. Once the filter was changed, the fuel system remained clean, enhancing engine performance. Some components in gasoline, such as olefins (which are a waxy substance), can cause deposits that foul injectors. But since ethanol burns 100 percent and leaves no residue, it cannot contribute to the formation of deposits. In fact, ethanol blends help keep fuel injectors cleaner.

Q: Is there enough corn to meet the demand for ethanol?

A: The USDA estimated that the corn crop for 2007 will be more than 13 billion bushels. The ethanol industry will require approximately 2.3 billion bushels or about 16 percent of the nation's corn supply to produce an estimated 6.9 billion gallons of ethanol for 2007. The National Corn Growers Association (NCGA) projects that ethanol demand and corn supply will continue on an even trend in the coming years because of increased corn yields through genetic improvements. On average, corn yields have increased by 3.5 bushels per acre per year since 1995. Based on the historical data, NCGA predicts corn yields to increase to around 180 bushels per acre by 2015 compared to the 150 bushels per acre in 2006. At 180 bushels per acre, ethanol production could increase to over 20 billion gallons without adding another acre to corn production. Hybrid yields are currently producing up to 280 bushels per acre, or enough corn to produce over 36 billion gallons of ethanol production.

Q: Does the use of ethanol really have a positive impact on our environment?

A: Ethanol adds oxygen to fuel, reducing the amount of harmful tailpipe emissions released when burned. In fact, The American Lung Association of Metropolitan Chicago credits ethanol-blended fuel with reducing smog-forming emissions there by 25% since 1990. In addition, carbon dioxide released during ethanol production is absorbed by row crops or other biomass used to make ethanol. Ethanol creates a better environment as vehicles using ethanol blends produce lower carbon monoxide (CO) and carbon dioxide (CO2) emissions, lower levels of hydrocarbon and non-methane hydrocarbon emissions and fewer evaporative emissions because ethanol has fewer volatile components.

Q: Aren't government subsidies supporting ethanol production today?

A: The blender's tax credit is a 51 cents per gallon tax credit paid to the petroleum industry as an incentive to blend ethanol into their gasoline. To prevent U.S. tax dollars from providing additional subsidies to foreign produced ethanol, there is a secondary duty of 54 cents per gallon that was created to offset the value of the ethanol tax credit. According to the Renewable Fuels Association, the ethanol industry in 2006 added $2.7 billion in new tax revenue for federal government and an additional $2.3 billion for state and local treasuries. The American Coalition for Ethanol stated in a recent report that ethanol provides a greater value for American taxpayers by adding at least $1.30 for every gallon of ethanol produced to the U.S. Treasury through the combination of increased tax revenue and lower farm program payments due to growing demand for corn.

Q: What are the benefits of ethanol?

A: There are many, some include: Additional octane: The ethanol in E10 adds two to three points of octane to ordinary gasoline, helping improve engine performance. Cleaner fuel injectors: Ethanol helps prevent the build-up of power-robbing deposits in fuel injection systems. Gas line antifreeze: Ethanol suspends moisture in the fuel systems, eliminating the need for gas tank additives in cold weather.